3.2.6. BROADBAND UV

As part of the various programs being operated by the CMDL STAR group, broadband UV instruments (Yankee UVB-1) have been in use at MLO, BRW, BAO, Bermuda, Kwajalein, and Boulder. These instruments have been compared at various times with the MLO UV spectroradiometer that was installed at MLO in July 1995 [*Bodhaine et al.*, 1998]. The calibration of the broadband instrument, reporting in erythemal units, is strongly dependent on total ozone because the erythemal response defined for human skin is significantly different from the spectral response of the broadband instrument [*Bodhaine et al.*, 1998]. When a broadband instrument is placed in the field, it is necessary to know the calibration as a function of ozone to determine accurate erythemal irradiance. However, the manufacturers of broadband instruments do not generally provide information on the ozone dependence of the calibration. Because of these uncertainties the broadband measurement program was suspended on December 31, 2000, and the only instruments remaining in operation are those at MLO and Boulder, the locations of UV spectroradiometers.